

Remarks

Reconsideration is requested in view of the above amendments and the following remarks. Claims 5, 13 and 38 are amended herein. The amendments to claims 5, 13, and 38 are grammatical in nature. Claims 1-10, 13-21, 23-42, and 44-51 are pending.

Applicants would like to thank the Examiner for the telephone interview on February 25, 2003 with Applicant's representatives, John Gresens and James Larson. During the interview, Applicant's representatives explained why the 35 USC 101 rejection was inapplicable, and explained why the claims are patentable over Burkart et al. (CA 2,073,092) and Gofuku et al. (US 5,269,868). No final agreement was reached concerning the allowability of any claims, although it is Applicant's understanding that the 35 USC 101 rejection will be withdrawn for the reasons discussed further below, and that the Examiner is inclined to allow claim 1, and that claims 21, 45 and 46 may contain allowable subject matter.

On February 25, 2003, Applicants re-sent to the Examiner an Information Disclosure Statement that was originally mailed on October 10, 2002 but which did not appear to be in the application file. Applicants request consideration of the Information Disclosure Statement, and that an initialed copy of Form 1449 be returned with the Examiner's next communication.

35 USC 101 rejection

Turning now to the office action, claims 1-10, 13-18, 21, 23-25, 30-34, 38-41 and 45-46 are provisionally rejected under 35 USC 101 as claiming the same invention as that of claims 1-7, 10-32 and 48 of copending application 09/184,186. Applicants respectfully traverse this rejection.

To constitute the same invention, identical subject matter must be claimed. MPEP 804(II)(A), Original 8th Ed., Rev. 1, Feb. 2003. In the current case, it is clear that the pending claims are not claiming the identical subject matter as the claims in 09/184,186. For example, application claim 1 recites "...to inhibit a following light pulse event if the time elapsing after a preceding light pulse event is less than a predetermined time or greater than a predetermined time". This feature is not recited in claim 1 of 09/184,186. Further, claim 1 of 09/184,186

recites an electrical gas discharge light delivery apparatus. This feature is not recited in claim 1 of this application. Other distinctions can be clearly seen upon comparison of the other claims in this application with the claims in 09/184,186.

Therefore, the same invention is not being claimed, and withdrawal of the rejection is requested.

35 USC 103(a) rejection

The Examiner has also rejected claims 1-10, 13-21, 23-42, and 44-51 under 35 USC 103(a) as being unpatentable over Burkart et al. (Canada 2,073,092) in view of Gofuku et al. (US 5,269,868) and Muncheryan (US 4,808,789). Applicants respectfully traverse this rejection.

Claims 1-10 and 13-20

Claim 1 is an independent claim, with claims 2-10 and 13-20 depending thereon. If claim 1 is found allowable, any claim depending thereon is allowable as well. Therefore, only independent claim 1 need be addressed at this time. By not separately addressing dependent claims 2-10 and 13-20, Applicant's are not conceding the rejection thereto, and Applicant's reserve the right to file arguments at a later date specifically addressing one or more of the dependent claims.

With respect to claim 1, this claim recites a method of releasing a glazing panel from a frame. The method includes arranging a pulsable light energy delivery apparatus adjacent the panel, and operating the delivery apparatus to transmit pulsed light energy comprising at least one light pulse event through the glazing panel to effect release of the panel from the frame. The delivery apparatus is controlled to inhibit a following light pulse event if the time elapsing after a preceding light pulse event is less than a predetermined time or greater than a predetermined time.

As disclosed, the use of continuous wave energy creates excessive heat build-up in the panel, which increases the power that is required to achieve release, and which can damage the

panel (page 12, lines 15-29). By using pulsed light energy, the heat absorbed in the panel can have time to dissipate, thereby increasing the effectiveness of the process (page 13, line 9-14).

Burkart et al. teaches a releasable joint between two elements. The joint includes at least an adhesive bead and a heatable separating member that is heated to effect release of the joint. Burkart et al. does not teach a light energy delivery apparatus that is pulsable to deliver pulsed light energy, nor the advantages that arise from the use of pulsed light energy in removing a glazing panel. In addition, Burkart et al. does not teach inhibiting a following light pulse event if the time elapsing after a preceding light pulse event is less than a predetermined time or greater than a predetermined time.

Gofuku et al. teaches a method of separating bonded substrates that are used in a liquid crystal display device. The substrates include first and second glass sheets 1, 2 and an adhesive 5 between the sheets. A laser beam 8 is used to heat the adhesive 5 to permit release of the sheets. Gofuku et al. does not teach a light energy delivery apparatus that is pulsable to deliver pulsed light energy, nor the advantages that arise from the use of pulsed light energy in removing a glazing panel. In addition, Gofuku et al. does not teach inhibiting a following light pulse event if the time elapsing after a preceding light pulse event is less than a predetermined time or greater than a predetermined time.

Muncheryan is relied upon to teach pulsing laser light. Muncheryan discloses a diode-pumped-laser system. As disclosed, the laser system is intended for use in industrial materials, processing, spectroscopy, medical surgery, metrology, fiberoptic communication, and related research work in a scientific laboratory (see abstract of Muncheryan). Muncheryan does not disclose using the laser system to release glazing panels. In addition, Muncheryan does not teach inhibiting a following light pulse event if the time elapsing after a preceding light pulse event is less than a predetermined time or greater than a predetermined time.

Burkart et al., Gofuku et al. and Muncheryan are not combinable in the manner proposed. Burkart et al. and Gofuku et al. relate to the field of removing adhesively secured substrates. The light energy in Burkart et al. and Gofuku et al. is not pulsed. Muncheryan, on the other hand, relates to the field of laser systems for research work in a scientific laboratory. Because Burkart

et al. and Gofuku et al. do not teach or suggest pulsing light, there is no suggestion to turn to the disparate field of Muncheryan for a teaching of pulsing laser light. As a result, the only suggestion for pulsing light energy to remove a glazing panel comes solely from Applicant's own disclosure. This is impermissible hindsight.

However, even if combined, the invention recited in claim 1 does not result. In particular, Burkart et al., Gofuku et al., and Muncheryan do not teach inhibiting a following light pulse event if the time elapsing after a preceding light pulse event is less than a predetermined time or greater than a predetermined time.

Therefore, Burkart et al., Gofuku et al. and Muncheryan do not render claim 1 unpatentable, because, even if combined, the claimed invention does not result.

Claims 21, 23-42 and 44

Claim 21 is an independent claim, with claims 23-42 and 44 depending thereon. If claim 21 is found allowable, any claim depending thereon is allowable as well. Therefore, only independent claim 21 need be addressed at this time. By not separately addressing dependent claims 23-42 and 44, Applicant's are not conceding the rejection thereto, and Applicant's reserve the right to file arguments at a later date specifically addressing one or more of the dependent claims.

With respect to claim 21, this claim recites apparatus for releasing a glazing panel from a frame. The apparatus includes a light energy delivery head that includes an electrically operable light emitting element that is operable to transmit non-laser, pulsed light comprising at least one light pulse event. The apparatus also includes a base unit with a supply of electrical power remote from the delivery head, and a flexible umbilical extending between and connecting the base unit and the delivery head.

Burkart et al., Gofuku et al., and Muncheryan are discussed in more detail above with respect to claim 1, and a detailed discussion will not be repeated here. In short, Burkart et al., Gofuku et al., and Muncheryan are simply not combinable, because there is no suggestion or teaching in Burkart et al. or Gofuku et al., which relate to substrate removal and do not pulse the

light energy, to turn to Muncheryan which does not deal with substrate removal. In addition, the light energy disclosed in Gofuku et al. and Muncheryan is laser energy. However, claim 21 specifically recites non-laser light energy. Therefore, even if combined, the invention recited in claim 21 does not result. Therefore, claim 21 is patentable over Burkart et al., Gofuku et al. and Muncheryan.

Claims 45 and 46

Claims 45 and 46 are each independent, with no claims depending therefrom.

With respect to claims 45 and 46, claim 45 recites a method of releasing a glazing panel that includes, among other features, directing at least one output light pulse from a flashlamp via an optical delivery head, and claim 46 recites a glazing panel releaser that includes, among other features, at least one flashlamp operable to produce light in the form of at least one light pulse.

Burkart et al., Gofuku et al. and Muncheryan do not teach the use of flashlamp light or pulsing the flashlamp light. Flashlamp produced light has considerable advantages over the types of light generated in the systems disclosed in Burkart et al., Gofuku et al. and Muncheryan. For example, the use of flashlamp produced light ensures that the light energy attenuates rapidly with distance such that at a few centimeters from the energy delivery head, light energy is significantly diminished from its maximum value (see, e.g., page 5, lines 17-27). This results in operational and health and safety benefits in that the energy delivered is sufficient to effect debonding at the glazing panel/bonding material interface, but diminishes in intensity rapidly to prevent damage to interior vehicle trim of the vehicle, as well as ameliorating danger to operatives using the equipment through misuse or accidental actuation (see, e.g., page 13, lines 9-25 and page 22, lines 7-12). In contrast, other light systems, for example lasers, produce serious health and safety implications, and have other drawbacks such as being relatively expensive (see, e.g., page 13, lines 3-7).

Burkart et al. and Gofuku et al. do not teach the use of flashlamps, or pulsing the light. Muncheryan teaches the use of laser light, which results in the problems discussed in the preceding paragraph. Muncheryan does mention flashlamps in col. 1, line 43. However, it is

clear that Muncheryan teaches away from using flashlamps, rather than teaching to use flashlamps (see, e.g., col. 1, lines 42-64).

Therefore, claims 45 and 46 are patentable over Burkart et al. and Gofuku et al.

Claim 47

Claim 47 is an independent claim, with claim 49 depending therefrom. If claim 47 is found allowable, any claim depending thereon is allowable as well. Therefore, only independent claim 47 need be addressed at this time. By not separately addressing dependent claim 49, Applicant's are not conceding the rejection thereto, and Applicant's reserve the right to file arguments at a later date specifically addressing one or more of the dependent claims.

Claim 47 recites a glazing panel releaser for releasing a glazing panel from a frame. The glazing panel releaser includes, among other features, a safety input apparatus requiring at least two input devices to be manually actuated before light energy is delivered by the glazing panel releaser.

Burkart et al., Gofuku et al., and Muncheryan are silent with respect to two input devices as recited in claim 47. The cited references fail to teach or suggest a safety input apparatus with at least two input devices that are manually actuated before light energy is delivered.

Therefore, claim 47 is patentable.

Claim 48

Claim 48 is an independent claim, with claims 50 and 51 depending therefrom. If claim 48 is found allowable, any claim depending thereon is allowable as well. Therefore, only independent claim 48 need be addressed at this time. By not separately addressing dependent claims 50 and 51, Applicant's are not conceding the rejection thereto, and Applicant's reserve the right to file arguments at a later date specifically addressing one or more of the dependent claims.

Claim 48 recites a glazing panel releaser for releasing a glazing panel from a frame. The glazing panel releaser includes, among other features, a control panel apparatus that includes

different settings which are switchable to alter at least one parameter of the pulsed light energy delivered.

As discussed in more detail above with respect to claim 1, Burkart et al., Gofuku et al., and Muncheryan are not combinable, as there is no suggestion in Burkart et al. or Gofuku et al. to pulse light. Therefore, there is no reason to turn to Muncheryan for a teaching of using pulsed light energy.

However, even if combined, the invention recited in claim 48 does not result. The cited references do not teach a control panel apparatus that includes different settings which are switchable to alter at least one parameter of the pulsed light energy delivered. Burkart et al. and Gofuku et al. do not teach alteration of any parameter of the light energy. Muncheryan does not teach a control panel apparatus that includes different settings as claimed.

Therefore, claim 48 is patentable.

All pending claims are patentable over Burkart et al., Gofuku et al. and Muncheryan. Withdrawal of the rejection is requested.

CONCLUSION

In view of the foregoing amendments and remarks, Applicants respectfully request favorable action on this matter. If a telephone conference would be helpful in resolving any remaining issue in this application, the Examiner is invited to contact the undersigned by telephone at the number provided below.

Respectfully submitted,

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By

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